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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,085	11/14/2000	Bruce S. Williamson	KCX-224 (15065)	8779

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EXAMINER

CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/712,085

Applicant(s)

Williamson et al.

Examiner

Ivars Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 26, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The limitation that the filter media is spirally wound "with generally complete overlap between adjacent layers such that edges of said layers are generally aligned in a common plane" (claim 1, lines 8-10; claim 13, lines 13-14; and claim 24, lines 11-12) does not appear to be supported by the disclosure originally filed, and hence constitutes **new matter**. Applicant should note that this limitation is not present in the written description of the invention; and should further note that the drawings do not support this limitation because: (a) drawing figures are not necessarily drawn to scale; and (b) Fig. 3 of the drawings appears to show outer layers of filtering material with edges that are at a higher level than edges of inner layers of filtering material (i.e. not in the same plane).

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 5-8, 10-14 and 17-20, 22-24 and 26-28 are again rejected under 35 U.S.C. 102(b) as being anticipated by Degen et al. (U.S. Patent No. 5,290,446). Although the helically wrapped filter of Degen et al. may initially produce spirally wrapped sheets of filter media with edges which are not all in the same plane, once these filter sheets are cut in the manner disclosed in lines 31-38 of col. 8, their edges will be in the same plane, as now required by claims 1, 2, 5-8, 10-14 and 17-20, 22-24 and 26-28.

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Claims 1, 8, 11, 13, 20, 22-24 and 26-28 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Pulek et al. (U.S. Patent No. 6,391,200). See Fig. 2 and the first line of the abstract.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 21 and 25 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Degen et al., particularly in view of Hiasa et al. (U.S. Patent No. 5,607,595). As pointed out in the previous Office Action, Degen et al. discloses that the filter element may include a carbon layer (col. 2, line 39), but fails to disclose that this carbon layer may be activated carbon. However, since activated carbon is notoriously well known as a fluid purification material, it would have been obvious to employ activated carbon as the carbon filtration material of Degen et al. Such modification is deemed to be especially obvious in view of the teaching by Hiasa et al. (see col. 6, lines 14-15) that it

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is known to purify fluids with activated carbon fibers in the form of a sheet (i.e. fabric).

Claims 3, 4, 15 and 16 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Degen et al., particularly in view of Hiasa et al. as applied above, further in view of Pall et al. (U.S. Patent No. 4,523,995). As pointed out in the previous Office Action, the modified primary reference discloses the claimed invention with the exception of the recited charge-modified media. Pall et al. discloses a charge modified filtration media of the type recited, and teaches (see col. 2, lines 67-68) that this media has enhanced particulate removal efficiencies. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the filter of the modified primary reference with the charge modified filtration media of Pall et al., in order to obtain the advantages disclosed by this secondary reference for the filter of this modified primary reference.

Claims 1, 2, 5-8, 10-14 and 17-20, 22-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degen et al. in view of Pulek et al. Should it be held that the filter media of Degen et al. is not spirally wrapped in the manner recited in the claims, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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wrap the filter media of this primary reference in the manner suggested by Pulek et al., in order to facilitate its assembly.

Claims 9, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degen et al. and Pulek et al. as applied above, further particularly in view of Hiasa et al. The modified primary reference discloses that the filter element may include a carbon layer (col. 2, line 39), but fails to disclose that this carbon layer may be activated carbon. However, since activated carbon is notoriously well known as a fluid purification material, it would have been obvious to employ activated carbon as the carbon filtration material of Degen et al. as modified by Pulek et al. Such modification is deemed to be especially obvious in view of the teaching by Hiasa et al. (see col. 6, lines 14-15) that it is known to purify fluids with activated carbon fibers in the form of a sheet (i.e. fabric).

Claims 3, 4, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degen et al., Pulek et al. and Hiasa et al. as applied above, further in view of Pall et al. The modified primary reference discloses the claimed invention with the exception of the recited charge-modified media. Pall et al. discloses a charge modified filtration media of the type recited, and teaches (see col. 2, lines 67-68) that this media has enhanced particulate removal efficiencies. It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to provide the filter of the modified primary reference with the charge modified filtration media of Pall et al., in order to obtain the advantages disclosed by this secondary reference for the filter of this modified primary reference.

Applicant's arguments filed February 26, 2003 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that the spiral arrangement now recited in the claims distinguishes over the helix arrangement of Degen et al. It is pointed out, however, that although the helically wrapped filter of Degen et al. may initially produce spirally wrapped sheets of filter media with edges which are not all in the same plane, once these filter sheets are cut in the manner disclosed in this patent (i.e. col. 8, lines 31-38), their edges will be in the same plane, as now required by the claims of this application. In any event, Pulek et al. discloses a filter element which is spirally wound in the recited manner, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to wrap the filter media of Degen et al. in the manner suggested by Pulek et al., in order to facilitate its assembly.



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Tinello (U.S. Patent No. 1,656,455) and Kim et al. (U.S. Patent No. 5,273,818) disclose similar spirally wound filter elements.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's supervisor, Mr. Thomas Dunn, can be reached at (703) 308-3318.

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
May 18, 2003